C-A OPERATIONS PROCEDURES MANUAL

4.44.3 Procedures for Reloading a PASS SLC Program From An EEPROM After Processor Memory Corruption

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4.44.3 Procedures for Reloading a PASS SLC Program From An EEPROM After Processor Memory Corruption

1. Purpose

1.1 This document describes the steps required to reload SLC Processor memory from an EEPROM module (1747-M11 or equivalent) after Processor memory has become corrupted. This procedure covers the A-division hardware only. This procedure is written to allow an individual with only general SLC knowledge to reload SLC processor memory. Applicable to A Division PASS system in Building 921 Peers 3, 23 & 25.

2. Responsibilities

2.1 The Operations Coordinator or properly trained Operations Personnel shall contact the head of the Access Control Group prior to performing a manual reload (by cycling the power off and then on again).

2.2 The head of the Access Control Group shall inform the Radiation Safety Committee representative and the Chief Electrical Engineer that a manual download has been performed as soon as possible.

3. Prerequisites

3.1 Executing this procedure requires a general knowledge of the PASS System, including locations of processor keyswitches and rack power switches, and the location of checksum records – both on the EEPROM module and in the SLC processor memory or corresponding display.

3.2 The appropriate PASS SLC containing a programmed Allen-Bradley EEPROM module (catalog number 1747-M11).

4. Precautions

4.1 The SLC processor should NEVER be removed or installed without powering down the rack.

4.2 EEPROM modules should be handled in a manner that will minimize static electricity.

4.3 The development system shall not be attached to the system without prior permission of the Radiation Safety Committee.

4.4 Only one peer may be reloaded from EEPROM at a time. After each download the checksums should be verified against what was originally loaded in RAM. Once the checksums agree, then another peer may be downloaded.

4.5 Only one reload shall be performed per day without being reviewed by the Radiation Safety Committee and Chief Electrical Engineer.

5. Procedure

5.1 Reloading Processor Memory from an EEPROM after Processor Memory Corruption.

5.1.1 In the event of RAM failure, the red 'FLT' LED will be lit on the SLC processor. Turn off the power to the rack.

5.12 Remove the SLC processor from the rack and make note of the checksum recorded on the EEPROM module or on the processor directly.

5.13 Replace the processor in the rack, verifying its key switch remains in 'RUN.'

5.1.4 Apply power to the rack. The 'RUN' and 'DH485' ('DH+' on 5/04 processors) will turn steady green once the program reloads and begins execution and communication with the PASS network.

5.1.5 Note the checksum in processor RAM (via display monitor or development system) and verify that it matches the checksum recorded on the EEPROM.

6. Documentation

6.1 After each EEPROM download a note of the download shall be made in the trouble log and a note shall be sent to the Radiation Safety Committee and the Chief Electrical Engineer.

7. References

7.1 SLC 500 Modular and Fixed Memory Modules installation instructions (publication 1747-5.1).

8. Attachments

None.